

173-178 (Cancelled)

179. (Withdrawn) The method of claim 188, further comprising:

attaching each of the one or more nucleotides to at least one nanoparticle.

180. (Withdrawn) The method of claim 179, wherein said at least one nanoparticle comprises a modified surface.

181. (Cancelled)

182. (Withdrawn) The method of claim 179, wherein said nanoparticles comprise gold and/or silver.

183. (Withdrawn) The method of claim 179, wherein each nucleotide is attached to a single nanoparticle or a nanoparticle aggregate.

184-186. (Cancelled)

187. (Withdrawn) The method of claim 179, wherein said nanoparticles are between 10 nm and 20 micrometers in diameter.

188. (Currently Amended) A method for determining a sequence of at least a portion of a DNA or an RNA strand, comprising:

a) removing fragmenting one or more nucleotides bases from a nucleic acid DNA or an RNA strand using a nuclease to form a plurality of fragments, each fragment comprising at least one base;

b) sequentially identifying each of the one or more nucleotides fragments by Raman spectroscopy; and

c) determining the sequence of ~~the nucleic acid~~ at least a portion of the DNA or RNA strand based on the sequential identification of each of the one or more fragments.

189. (Currently Amended) The method of claim 188, wherein each ~~type of nucleotide fragment~~ is labeled with a Raman label.
190. (Previously Presented) The method of claim 188, wherein the nucleic acid comprises labeled thymine.
191. (Previously Presented) The method of claim 188, wherein the nucleic acid comprises labeled adenine.
192. (Previously Presented) The method of claim 188, wherein the nucleic acid comprises labeled cytosine.
193. (Previously Presented) The method of claim 188, wherein the nucleic acid comprises labeled guanine.
194. (Previously Presented) The method of claim 188, wherein the nucleic acid comprises labeled uracil.
195. (Currently Amended) The method of claim 188, wherein ~~said~~ sequentially identifying each of the one or more fragments by Raman spectroscopy comprises sequentially identifying each of the one or more nucleotides fragments ~~are identified~~ by surface enhanced Raman spectroscopy (SERS) and/or surface enhanced resonance Raman spectroscopy (SERRS).

196. (Withdrawn) The method of claim 179, wherein the act of attaching each of the one or more nucleotides to at least one nanoparticle occurs prior to the act of removing one or more nucleotides from a nucleic acid.
197. (Withdrawn) The method of claim 179, wherein the act of attaching each of the one or more nucleotides to at least one nanoparticle occurs after the act of removing one or more nucleotides from a nucleic acid.
198. (Currently Amended) The method of claim 188, wherein each of the one or more ~~nucleotides~~ bases is free of an emission-enhancing aid.
199. (New) The method of claim 188, wherein the act of sequentially identifying each of the one or more fragments by Raman spectroscopy comprises attaching each fragment to a surface, and identifying each fragment on the surface using Raman spectroscopy.
200. (New) The method of claim 199, wherein the surface is the surface of a metal film.
201. (New) The method of claim 199, wherein the surface is the surface of a metal particle.